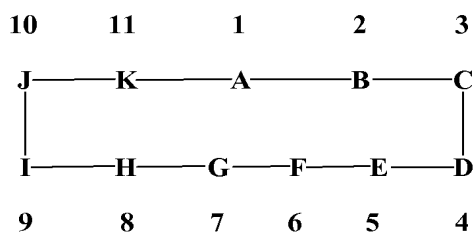


Amendments to the Claims

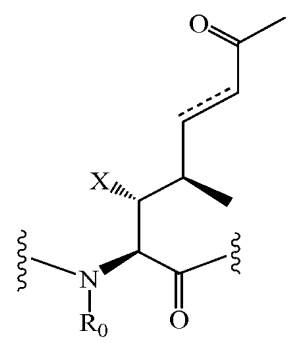
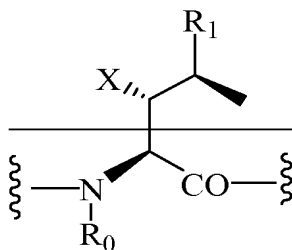
This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A compound of Formula (I):



Formula I

wherein A is an amino acid of Formula (II):



Formula II

wherein:

R_0 is H or CH_3 ;

$R_1 =$ $C(=O)OR_2$;
 $C(O)NR_3R_4$;
 $CH=N-Y$;

$\text{CH}(\text{NR}_5\text{R}_6)\text{R}_7$;
 $\text{CH}(\text{OR}_8)\text{R}_9$;
 $\text{CH}(\text{OR}_{10})_2$;
 $\text{CH}(\text{SR}_{12})_2$;
 $\text{CH}=\text{CHC}(=\text{O})\text{Me}$;
 $\text{CH}_2\text{CH}_2\text{C}(=\text{O})\text{Me}$;
 $\text{CH}=\text{CHCH}(\text{OR}_{16})\text{Me}$;
 $\text{CH}_2\text{CH}_2\text{CH}(\text{OR}_{16})\text{Me}$;
 $\text{CH}=\text{CHCH}(\text{NR}_{17}\text{R}_{18})\text{Me}$;
 $\text{CH}_2\text{CH}_2\text{CH}(\text{NR}_{17}\text{R}_{18})\text{Me}$;
 $\text{CH}=\text{CHC}(=\text{N}-\text{Y})\text{Me}$;
 $\text{CH}_2\text{CH}_2\text{C}(=\text{N}-\text{Y})\text{Me}$;
 $\text{CH}=\text{CHC}(\text{OR}_{19})_2\text{Me}$;
 $\text{CH}_2\text{CH}_2\text{C}(\text{OR}_{19})_2\text{Me}$;
 $\text{CH}_2-\text{CH}_2\text{C}(-\text{CR}_{20}\text{R}_{21})\text{Me}$;
 $\text{CH}=\text{CHC}(\text{SR}_{22})_2\text{Me}$;
 $\text{CH}_2\text{CH}_2\text{C}(\text{SR}_{22})_2\text{Me}$;
 $\text{CH}=\text{CHC}(=\text{O})\text{NR}_{25}\text{R}_{26}$;
 $\text{CH}_2\text{CH}_2\text{C}(=\text{O})\text{NR}_{25}\text{R}_{26}$;
 $\text{CH}=\text{CHC}(=\text{O})\text{OR}_{26}$;
 $\text{CH}_2\text{CH}_2\text{C}(=\text{O})\text{OR}_{26}$;
 $\text{CH}=\text{CHC}(=\text{O})\text{CH}_2\text{CH}_2\text{NR}_{27}\text{R}_{28}$;
 $\text{CH}_2\text{CH}_2\text{C}(=\text{O})\text{CH}_2\text{CH}_2\text{NR}_{27}\text{R}_{28}$;
 $\text{CH}=\text{CHC}(=\text{O})\text{CH}=\text{CHNR}_{29}\text{R}_{30}$;
 $\text{CH}_2\text{CH}_2\text{C}(=\text{O})\text{CH}=\text{CHNR}_{29}\text{R}_{30}$;
 $\text{CH}=\text{CH}-\text{C}(\text{OR}_{31})\text{R}_{32}\text{Me}$;
 $\text{CH}_2\text{CH}_2\text{C}(\text{OR}_{31})\text{R}_{32}\text{Me}$;
 $\text{CH}=\text{CHC}(=\text{O})\text{CH}_2\text{C}(\text{OH})\text{R}_{33}\text{R}_{34}$; or
 $\text{CH}_2\text{CH}_2\text{C}(=\text{O})\text{CH}_2\text{C}(\text{OH})\text{R}_{33}\text{R}_{34}$;

R_2 and R_{26} are the same or different and independently selected from the group consisting of:

hydrogen;
 C_1 - C_6 -straight alkyl chain;
 C_3 - C_6 -straight alkenyl chain;
 C_3 - C_6 -branched alkyl chain;
 C_4 - C_6 -branched alkenyl chain;
 C_3 - C_6 -straight alkynyl chain;
 C_3 - C_7 -cycloalkyl;
 CH_2 -(C_3 - C_7 -cycloalkyl);
 $(\text{CH}_2)_n$ -aryl ring;
 $(\text{CH}_2)_n$ -heteroaryl ring;
 CH_2OCH_3 ;
 CH_2SCH_3 ;
 $\text{CH}_2\text{CH}_2\text{F}$;
 CH_2CF_3 ;
 $\text{CH}_2\text{CH}_2\text{CF}_3$;
 $\text{CH}(\text{CF}_3)_2$; and
 $\text{CH}_2\text{OCH}_2\text{OC}(\text{O})\text{CH}_3$;

~~R₃, R₄, R₅, R₆, R₁₀, R₁₁, R₁₂, R₁₇, R₁₈, R₁₉, R₂₂, R₂₅, R₂₇, R₂₈, R₂₉, and R₃₀ are the same or different and independently selected from the group consisting of:~~

~~hydrogen;
C₁-C₆-straight alkyl chain;
C₃-C₆-straight alkenyl chain;
C₃-C₆-branched alkyl chain;
C₄-C₆-branched alkenyl chain;
C₃-C₆-straight alkynyl chain;
C₃-C₇-cycloalkyl;
CH₂-(C₃-C₇-cycloalkyl);
(CH₂)_n-aryl ring; and
(CH₂)_n-heteroaryl ring;~~

~~R₃ and R₄, R₅ and R₆, R₁₀, R₁₂, R₁₇ and R₁₈, R₁₉, R₂₂, R₂₅ and R₂₆, R₂₇ and R₂₈, R₂₉ and R₃₀ are together -CH₂CH₂-, -CH₂CH₂CH₂-, -CH₂CH₂CH₂CH₂-, -CH₂CH₂CH₂CH₂CH₂- and -CH₂CH₂CH₂CH₂CH₂CH₂- that results in the formation of a cyclic moiety that contains the heteroatom or heteroatoms to which they are bound;~~

~~R₈, R₁₆, and R₃₁ are the same or different and independently selected from the group consisting of:~~

~~hydrogen;
C₁-C₆-straight alkyl chain;
C₃-C₆-straight alkenyl chain;
C₃-C₆-branched alkyl chain;
C₄-C₆-branched alkenyl chain;
C₃-C₆-straight alkynyl chain;
C₃-C₇-cycloalkyl;
CH₂-(C₃-C₇-cycloalkyl);
(CH₂)_n-aryl ring;
(CH₂)_n-heteroaryl ring;
alkanoyl;
alkenoyl;
alkynoyl;
aryloyl;
arylalkanoyl;
alkylaminocarbonyl;
arylaminocarbonyl;
arylalkylaminocarbonyl;
alkyloxycarbonyl;
aryloxycarbonyl; and
arylalkyloxycarbonyl;~~

~~R₇, R₉, R₁₃, R₁₄, R₁₅, R₂₀, R₂₁, R₂₃, R₂₄, R₃₂, R₃₃, and R₃₄ are the same or different and independently selected from the group consisting of:~~

~~hydrogen;
deuterium;
halogen;
hydroxyl;
nitrile;~~

substituted and unsubstituted C₁-C₆-straight alkyl chain;
 substituted and unsubstituted C₂-C₆-straight alkenyl chain;
 substituted and unsubstituted C₃-C₆-branched alkyl chain;
 substituted and unsubstituted C₄-C₆-branched alkenyl chain;
 substituted and unsubstituted C₂-C₆-straight alkynyl chain;
 substituted and unsubstituted C₄-C₆-branched alkynyl chain;
 substituted and unsubstituted C₄-C₆-chain having alkenyl and alkynyl groups;
 substituted and unsubstituted C₃-C₇-cycloalkyl;
 substituted and unsubstituted (CH₂)_p-(C₃-C₇-cycloalkyl);
 substituted and unsubstituted aryl;
 substituted and unsubstituted heteroaryl;
 substituted and unsubstituted arylalkyl;
 substituted and unsubstituted heteroarylalkyl;
 COOH;
 COOR₂; and
 C(O)NR₃R₄;

n = 0, 1, 2, 3 or 4;

p = 0, 1, 2, or 3;

X = hydrogen;
 hydroxyl; or
 hydroxyl group derivatized with an alkanoyl, aryloyl, alkylaminocarbonyl,
 arylaminocarbonyl, arylalkylaminocarbonyl, alkyloxycarbonyl, aryloxycarbonyl, or
 arylalkyloxycarbonyl group;

Y = —C₁-C₆-straight and branched chain alkyl;
 C₃-C₆-straight and branched chain alkenyl;
 arylalkyl;
 heteroarylalkyl;
 C₁-C₆-straight and branched chain alkyl-oxy;
 aryloxy;
 acyloxy;
 arylalkyloxy;
 C₁-C₆-straight and branched chain alkyl-amino;
 arylamino;
 arylalkylamino;
 heteroarylamino;
 heteroarylalkylamino;
 C₁-C₆-straight and branched chain alkyl-carboxamido;
 arylcarboxamido;
 heteroarylcarboxamido;
 C₁-C₆-straight and branched chain alkyl-sulfonamido;
 arylsulfonamido;
 arylalkylsulfonamido;
 heteroaryl-sulfonamido;
 heteroarylalkylsulfonamido; or
 NH₂C(O)NH;

CO- in Formula II is covalently bound to an α -amino group of B in Formula I to form an amide linkage, and -N-R₀ in Formula II is covalently bound to a carboxylic acid of K to form an amide linkage;

B is an amino acid selected from the group consisting of:

- α -aminobutyric acid;
- alanine;
- threonine;
- valine;
- norvaline; and
- a modified α -aminobutyric acid, alanine, valine, or norvaline, wherein a carbon atom in a side chain is substituted with a hydroxyl group;

C is a sarcosine;

D is an amino acid selected from the group consisting of:

- leucine;
- N-methyl leucine;
- valine;
- γ -hydroxy-N-methyl leucine; and
- γ -hydroxy leucine;

E is an amino acid selected from the group consisting of:

- valine;
- norvaline; and
- a modified valine or norvaline, wherein a carbon atom in a side chain is substituted with a hydroxyl group;

F is an amino acid selected from the group consisting of:

- leucine;
- N-methyl leucine;
- γ -hydroxy-N-methyl leucine; and
- γ -hydroxy leucine;

G is α -aminobutyric acid or alanine;

H is D-alanine;

I and J are independently selected from the group consisting of:

- leucine;
- N-methyl leucine;
- γ -hydroxy-N-methyl leucine; and
- γ -hydroxy leucine;

K is N-methyl valine or valine;

or a pharmaceutically acceptable salt thereof.

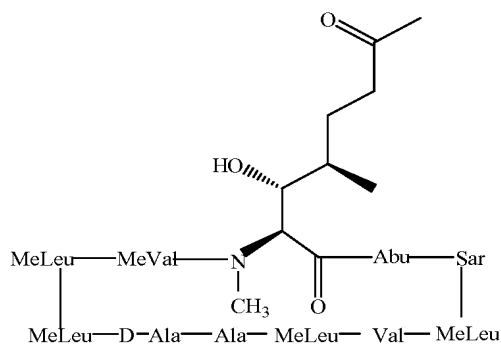
2. (canceled)

Chemical structure of the 12-O-acetylmagnolide derivative of compound 1. The structure shows a central carbon atom bonded to a methyl group (CH₃), a hydroxyl group (HO), a 12-O-acetylmagnolide side chain, and a peptide chain. The peptide chain consists of a central amide bond (N-CH) with a methyl group (CH₃) on the nitrogen. The side chain of the nitrogen is MeLeu-MeVal. The side chain of the carbon is Abu-Sar. The 12-O-acetylmagnolide side chain is a 12-membered lactone ring with an acetyl group (O-C(=O)-CH₃) at the 12-position. The stereochemistry is indicated by wedges and dashes.

The chemical structure of compound 1 is a cyclic peptide with a 14-membered ring. The backbone consists of 14 amino acids: MeLeu, MeVal, N-methyl-L-proline, Abu, Sar, MeLeu, Val, D-Ala, Ala, N-methyl-L-proline, MeVal, MeLeu, and MeLeu. The side chains are: MeLeu (isobutyl), MeVal (isopropyl), N-methyl-L-proline (methyl), Abu (3-aminobutyl), Sar (2-aminoethyl), MeLeu (isobutyl), Val (isopropyl), D-Ala (methyl), Ala (methyl), N-methyl-L-proline (methyl), MeVal (isopropyl), MeLeu (isobutyl), and MeLeu (isobutyl). A prenylated chain is attached to the N-methyl-L-proline at position 10, consisting of a 3-hydroxy-4-methylpent-2-enyl group. A hydroxyisobutyrate side chain is attached to the N-methyl-L-proline at position 11, consisting of a 2-hydroxy-3-methylbutyrate group.

6-75. (canceled).

76. (withdrawn – currently amended) A compound according to claim [[2]] 1, wherein the compound has the following formula:



Formula XI.

77-102. (canceled)

103. (original) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 1 and one or more pharmaceutical excipients.

104-182. (canceled)

183. (withdrawn) A method of suppressing or reducing immune response in a mammal comprising:

administering a therapeutically effective amount of the compound of claim 1 to the said mammal under conditions effective to suppress immune response in a mammal.

184. (withdrawn) A method of treating a mammal with a chronic inflammatory or autoimmune disease comprising:

administering a therapeutically effective amount of the compound of claim 1 to the mammal under conditions effective to treat the chronic inflammatory or autoimmune disease.

185. (withdrawn) The method of claim 184, wherein the chronic inflammatory or autoimmune disease is selected from the group consisting of asthma, rheumatoid arthritis, multiple sclerosis, psoriasis, and ulcerative colitis.

186. (withdrawn) A method of treating a mammal with a neurodegenerative disease comprising:

administering a therapeutically effective amount of the compound of claim 1 to the mammal under conditions effective to treat the neurodegenerative disease.

187. (withdrawn) The method of claim 186, wherein the neurogenerative disease is selected from the group consisting of diabetic neuropathy, amyotrophic lateral sclerosis, spinal cord injury, Alzheimer's disease, Parkinson's disease, and stroke.

188. (withdrawn) A method of treating a mammal with infectious diseases caused by HIV, fungal pathogens, or parasites, said method comprising:

administering a therapeutically effective amount of the compound of claim 1 to the mammal under conditions effective to treat the infectious disease.